

Abstract of the Invention

Methods and apparatus for generating multi-tone signals, e.g., OFDM signals, are described. Analog signals corresponding to individual tones of a multi-tone signal are separately generated and filtered. Different prefixes are generated for each of the multiple tones. The prefixes for all the tones are of the same duration. One signal prefix is generated for each tone during each symbol transmission period. Each prefix may include multiple parts with a first part being generated from a current symbol and the second part being generated from the preceding symbol. By generating each multipart prefix from the periodic signal representing the current symbol and the periodic signal representing the preceding symbol, a smooth signal transition will occur at the point one symbol transmission period stops and the next one begins. Separate antennas are used to transmit signals corresponding to different tones of a multi-tone signal with the signals combining in the communications channel.